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Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/047,982
				Filing Date	1/14/02
				First Named Inventor	Steve Teig
				Group Art Unit	2805
				Examiner Name	DPH/NSN
Sheet	1	of	45	Attorney Docket Number	SPLX.P0053

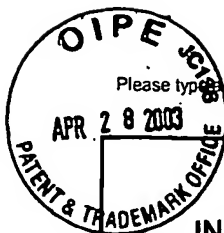
U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No. ¹	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code* (if known)			
✓	1.	2001/ 0003843	A1	Scepanovic et al.	06-14-01	
	2.	4,615,011		Linsker	09-30-86	
	3.	4,673,966		Shimoyama	06-16-87	
	4.	4,782,193		Linsker	11-01-88	
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Examiner Signature		Date Considered	DPH/NSN
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				Filing Date	1/14/02
				First Named Inventor	Steve Teig
				Group Art Unit	2829
				Examiner Name	6715000
Sheet	2	of	85	Attorney Docket Number	SPLX.P0053

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


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			Filing Date	1/14/02	
			First Named Inventor	Steve Teig	
			Group Art Unit	2825	
			Examiner Name	G. R. R. R. R.	
Sheet	3	of	15	Attorney Docket Number	SPLX.P0053

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53.	6,516,455	B1	Teig et al.	02-04-03		
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Examiner* Initials	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ³	Number ⁴	Kind Code (if known) ⁵				
	55.	JP	64-15947		Ouchi	01-19-89		
	56.	JP	04000677		Fujiwara et al.	01-1992		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)			Filing Date	1/14/02	
			First Named Inventor	Steve Teig	
			Group Art Unit	2825	
			Examiner Name	Garbow	
Sheet	4	of	5	Attorney Docket Number	SPLX.P0053

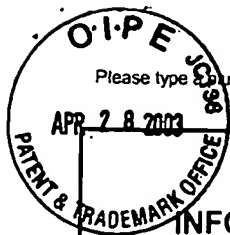
OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
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				Filing Date	1/14/02
				First Named Inventor	Steve Teig
				Group Art Unit	252
				Examiner Name	6502201
Sheet	5	of	5	Attorney Docket Number	SPLX.P0053

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Examiner Signature		Date Considered	12/10/01
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>			Application Number	10/047,982	
			Filing Date	1/14/02	
			First Named Inventor	Steven Teig	
			Group Art Unit	2825	
			Examiner Name	Y. P. P. P. P.	
Sheet	1	of	13	Attorney Docket Number	SPLX.P0053

RELATED U.S. PATENT DOCUMENTS						
Examiner Initials	Cite No.	U.S. Patent Document		Date of filing MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data
		Number				
9	1.	2003/0079193		12-07-2001	Steven Teig et al.	Parent application; present application is a continuation of 2003/079193.
	2.	2003/0018947		12-07-2001	Steven Teig et al.	Application filed on the same day as the parent application 2003/0079193, with the same specification as the present application except for summary and abstract.
	3.	2002/0147958		10-19-2001	Steven Teig et al.	Parent application per the preliminary amendment dated 2/19/03.
	4.	2003/0063614		01-04-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.
	5.	2003/0064559		01-04-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.
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Examiner Signature		Date Considered	12/14
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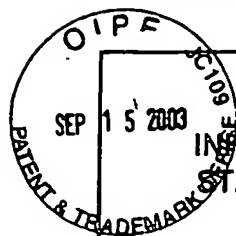
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				Examiner Name	Gorsen
Sheet	2	of	23	Attorney Docket Number	SPLX.P0053

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RELATED U.S. PATENT DOCUMENTS					
15.	2003/0066043	01-13-2002	Steven Teig et al.	Continuation of 2003/0088844 per preliminary amendment.	
16.	2003/0115566	01-13-2002	Steven Teig	Continuation of 2003/0088844 per preliminary amendment.	
17.	2003/0066044	01-13-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.	
18.	2003/0066045	01-13-2002	Steven Teig et al.	Application with some of the same parent provisional applications and with the same specification as the present application except for summary and abstract.	
19.	2002/0133798	12-06-2000	Steven Teig et al.	Application regarding related placement technology	
20.	2002/0100007	12-06-2200	Steven Teig et al.	Parent application; present application is a CIP of 2002/0100007.	
21.	2002/0073390	12-13-2000	Steven Teig et al.	Application regarding related placement technology	
22.	S/N 09/737,220	12-13-2000	Steven Teig et al.	Application regarding related placement technology	
23.	S/N 09/737,245	12-13-2000	Steven Teig et al.	Application regarding related placement technology	
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Application Number	10/047,982
				Filing Date	1/14/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	GARWOOD
Sheet	3	of	23	Attorney Docket Number	SPLX.P0053

RELATED U.S. PATENT DOCUMENTS					
07	32.	2003/0088841	12-23-2002	Steven Teig et al.	Application regarding related placement technology.

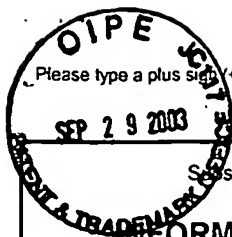
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Sheet	1	of	1	Application Number	10/047,982
				Filing Date	1/4/02
				First Named Inventor	Steven Teig
				Group Art Unit	2825
				Examiner Name	GARWIN
				Attorney Docket Number	SPLX.P0053

U.S. PATENT DOCUMENTS

Examiner* Initials	Cite No. ¹	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Related Application Data
		Number				
57	1.	2003/0101428 S/N 10/040,915		01-05-2002	Steven Teig et al.	Previously specified
	2.	2003/0043827 S/N 10/040,953		01-05-2002	Steven Teig et al.	Previously specified
	3.	2003/0023943 S/N 10/040,954		01-05-2002	Steven Teig et al.	Previously specified
	4.	2003/0066042 S/N 10/040,963		01-05-2002	Steven Teig et al.	Previously specified
	5.	2002/0174412 S/N 10/041,942		01-07-2002	Steven Teig et al.	Previously specified
	6.	2003/0088844 S/N 10/041,957		01-07-2002	Steven Teig et al.	Previously specified
	7.	2002/0199165 S/N 10/046,864		01-13-2002	Steven Teig et al.	Previously specified
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	12.	2003/0088841 S/N 10/329,241		12-23-2002	Steven Teig et al.	Previously specified
	13.	2003/0088845 S/N 10/047,978		01-13-2002	Steven Teig et al.	Continuation of the parent application (2003/0079193) of the present application.

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(use as many sheets as necessary)				First Named Invent r	Steve Teig
				Group Art Unit	2825
				Examiner Name	GARBOWSKI
Sheet	1	of	7	Attorney Docket Number	SPLX.P0053

U.S. PATENT DOCUMENTS					
Examiner* Initials	Cite No. ¹	U.S. Patent Document Number Kind Code ² (if known)	Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
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				First Named Inv nt r	Steve Teig
				Group Art Unit	2825
				Examiner Name	GARBOWSK
Sheet	2	of	7	Attorney Docket Number	SPLX.P0053

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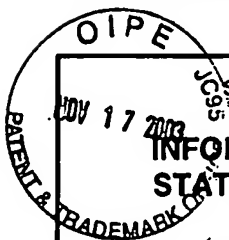
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				First Named Inventor	Steve Teig
				Group Art Unit	2825
				Examiner Name	GARBOWEN
Sheet	3	of	7	Attorney Docket Number	SPLX.P0053

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44.	6,557,145	B2	04-29-2003	Boyle et al.		
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Examiner Initials	Cite No. ¹	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Office ²	Number ³	Kind Code (if known)				
W	46.	JP	411296560	A	Matsumoto et al.	10-29-1999	with English translation of Abstract;	
M	47.	JP	2000-82743	A	Igarashi et al.	03-21-2000	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
I	48.	JP	H03-173471	A	Tawada et al.	07-26-1991	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
I	49.	JP	H05-243379	A	Masako Kubota	09-21-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the application.	✓
I	50.	JP	H05-102305	A	Akihiro Sato	04-23-1993	with Japanese Patent Office's English translation of Abstract; and with English translation of the	✓

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				Filing Date	1/14/02
				First Named Inventor	Steve Teig
				Group Art Unit	2825
				Examiner Name	GARBOWSN
Sheet	4	of	7	Attorney Docket Number	SPLX.P0053

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							application.
7	51.	JP	H07-86407	A	Shinpei Miura	03-31-1995	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓
	52.	JP	H09-162279	A	Masaaki Yoshida	06-20-1997	with Japanese Patent Office's English translation of Abstract; and with English translation of the application. ✓

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of

7

Applicatⁿ Number

10/047,982

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Steve Teig

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NON PATENT LITERATURE DOCUMENTS

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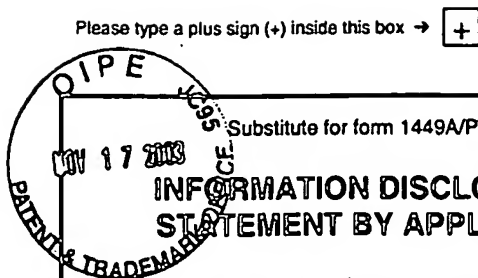
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Sheet	6	of	7	Attorney Docket Number	SPLX.P0053

FOREIGN PATENT DOCUMENTS

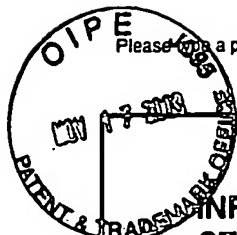
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Substitute for form 1449A/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT (use as many sheets as necessary)				Applicant Number	10/047,982
				Filing Date	1/14/02
				First Named Inventor	Steve Teig
				Group Art Unit	2825
				Examiner Name	GARROWFW
Sheet	7	of	7	Attorney Docket Number	SPLX.P0053

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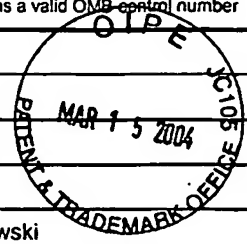
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				Filing Date	1/14/2002
				First Named Inventor	Steve Teig
				Group Art Unit	2825
				Examiner Name	Leigh M. Garbowski
				Attorney Docket Number	SPLX.P0053
Sheet	1	of	1		



U.S. PATENT DOCUMENTS						
Examiner* Initials	Cite No.	U.S. Patent Document		Date of Publication MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code ² (if known)			
W 1	1.	2003/0121017	A1	06-26-2003	Andreev et al.	
	2.	6,088,519		07-11-2000	Koford	

NON PATENT LITERATURE DOCUMENTS			
Examiner* Initials	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ⁶
W 1	3.	Chen et al., Optimal Algorithms for Bubble Sort Based Non-Manhattan Channel Routing, May 1994, Computer-Aided Design of Integrated Circuits and Systems, IEEE Transactions Volume: 13 Issues, pp. 603-609.	
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